

of said surfaces at substantially any point thereon is substantially perpendicular to the axis of rotation of said rotor, and (ii) said flux traverses said segment without crossing an air gap, said stator further comprising:

- a) an inner restraining means for protecting and strengthening at least said tooth section; and
- b) an outer restraining means for securing said plurality of segments in generally circular abutting relation to each other.

26. An amorphous metal stator for a radial flux motor having a rotor, said stator comprising a plurality of segments, each segment having a plurality of layers of amorphous metal strips, wherein each of said strips has a top and a bottom surface and is oriented such that (i) a line normal to either of said surfaces at substantially any point thereon is substantially perpendicular to the axis of rotation of said rotor, and (ii) said flux traverses said segment without crossing an air gap, said stator having a core loss less than "L" when operated at an excitation frequency "f" to a peak induction level  $B_{max}$  wherein L is given by the formula  $L = 0.0074 f (B_{max})^{1.3} + 0.000282 f^{1.5} (B_{max})^{2.4}$ , said core loss, said excitation frequency and said peak induction level being measured in watts per kilogram, hertz, and teslas, respectively.

35. A brushless radial flux DC motor comprising:

- a) an amorphous metal stator and a rotor disposed for rotation therewithin, said stator comprising a plurality of segments, each segment comprising a plurality of layers of amorphous metal strips, wherein each of said strips has a top and a bottom surface and is oriented such that (i) a line normal to either of said surfaces at substantially any point thereon is substantially perpendicular to the axis of rotation of said rotor, and (ii) when traversing said segment, said flux crosses one air gap; and
- b) means for supporting said stator and said rotor in predetermined positions relative to each other.

36. A brushless radial flux DC motor comprising:

- a) an amorphous metal stator and a rotor disposed for rotation therewithin, said stator comprising a plurality of heat-treated segments, each segment comprising a plurality